Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Withdrawn): A formulation comprising an anticancer agent and a base excision repair (BER) inhibitor admixed with pharmaceutically acceptable excipient, wherein the anticancer agent induces formation of AP sites.

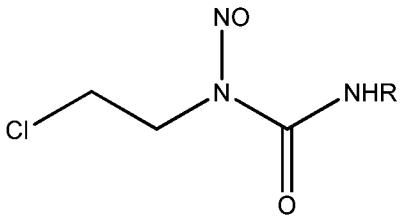
Claims 2-58 (Cancelled)

Claim 59 (Currently Amended): A method for potentiating a therapeutic effect of an anticancer agent that induces formation of AP sites in cancer cells of a patient, comprising administering to a patient with cancer an anticancer agent that induces formation of AP sites in cancer cells of the patient and an amount of a base excision repair (BER) inhibitor that is effective to potentiate the cytotoxicity of the anticancer agent to the cancer cells, the BER inhibitor selected from the group consisting of an AP endonuclease inhibitor, a DNA glycosylase inhibitor, a DNA polymerase inhibitor, and a DNA ligase inhibitor, ~~whereby the BER inhibitor potentiates the effect of the anticancer agent~~ wherein the AP endonuclease inhibitor includes an amine group and binds to the AP site to prevent AP endonuclease-mediated cleavage of phosphodiester bonds.

Claim 60 (Previously Presented): The method of claim 59, wherein said anticancer agent is selected from a DNA oxidizing agent, ultraviolet radiation, a DNA intercalating agent, a radiosensitizing agent, a cross-linking agent, and an alkylating agent.

Claim 61 (Withdrawn): The method of claim 60, wherein said anticancer agent is a cross- linking agent.

Claim 62 (Withdrawn): The method of claim 61, wherein said cross- linking agent is a mustine having the structure of formula II:

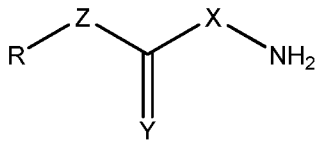


wherein R is an optionally substituted hydrocarbon substituent.

Claim 63 (Cancelled)

Claim 64 (Previously presented): The method of claim 60 wherein said BER inhibitor is an AP endonuclease inhibitor.

Claim 65 (Previously Presented): The method of claim 64, wherein said AP endonuclease inhibitor is selected from methoxyamine and a compound having a structure of Formula I:



Formula I

wherein X is O or NH,

Y is O, S, or NH,

Z is absent or represents O, S, or NH, and

R represents a hydrogen or a hydrocarbon moiety,

and pharmaceutically acceptable salts thereof.

Claim 66 (Cancelled)

Claim 67 (Withdrawn): The method of claim 64, wherein said method further comprises administering a topoisomerase inhibitor.

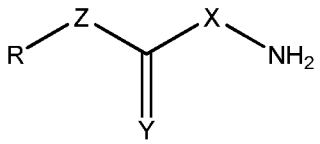
Claims 68-74 (Cancelled)

Claim 75 (Original): The method of claim 60, wherein said anticancer agent is an alkylating agent.

Claim 76 (Cancelled)

Claim 77 (Previously Presented): The method of claim 75, wherein said BER inhibitor is an AP endonuclease inhibitor.

Claim 78 (Previously Presented): The method of claim 77, wherein said AP endonuclease inhibitor is selected from methoxyamine and a compound having a structure of Formula I:



Formula I

wherein X is O or NH,

Y is O, S, or NH,

Z is absent or represents O, S, or NH, and

R represents a hydrogen or a hydrocarbon moiety,

and pharmaceutically acceptable salts thereof.

Claims 79-82 (Cancelled)

Claim 83 (Withdrawn): The method of claim 60, wherein said anticancer agent is a DNA oxidizing agent.

Claim 84 (Cancelled)

Claim 85 (Withdrawn): The method of claim 60, wherein said anticancer agent is a radiosensitizing agent.

Claims 86-87 (Cancelled)

Claim 88 (Withdrawn): The method of claim 60, wherein said anticancer agent is ultraviolet radiation.

Claims 89-97 (Cancelled)

Claim 98 (Original): The method of claim 59, wherein the amount of anticancer agent is subtherapeutic when administered in the absence of the base excision repair inhibitor.

Claim 99 (Cancelled)

Claim 100 (Cancelled)

Claim 101 (Withdrawn): The method of claim 99, wherein said base excision repair inhibitor is a PARP inhibitor.

Claim 102 (Cancelled)

Claim 103 (Withdrawn): The method of claim 99, wherein said BER inhibitor is an inhibitor of DNA polymerase.

Claim 104 (Withdrawn): The method of claim 103, wherein said inhibitor of DNA polymerase inhibits DNA polymerase β, γ or, ε.

Claim 105 (Withdrawn): The method of claim 99, wherein said base excision repair inhibitor is a DNA ligase inhibitor.

Claim 106 (Withdrawn): The method of claim 105, wherein said DNA ligase inhibitor inhibits the action of DNA ligase I or DNA ligase II.

Claims 107-110 (Cancelled)

Claim 111 (Withdrawn): The method of claim 59, wherein said method further comprises administering a DNA alkyltransferase inhibitor.

Claim 112 (Cancelled)

Claim 113 (Withdrawn): The method of claim 59, wherein said method further comprises administering a topoisomerase inhibitor.

Claims 114-171 (Cancelled)

Claim 172 (Withdrawn): A kit comprising a pharmaceutical preparation comprising a base excision (BER) repair inhibitor and instructions for coadministration of the pharmaceutical preparation with an anticancer agent that induces formation of AP sites.

Claims 173-229 (Cancelled)

Claim 230 (Withdrawn) The method of claim 65 wherein the anticancer agent is an antimetabolite.

Claim 231 (Withdrawn) The method of claim 65 wherein the anticancer agent is 5-FU.

Claim 232 (Withdrawn) The method of claim 65 wherein the anticancer agent is fludarabine.

Claim 233 (Withdrawn) The method of claim 230 wherein the AP endonuclease inhibitor is methoxyamine.